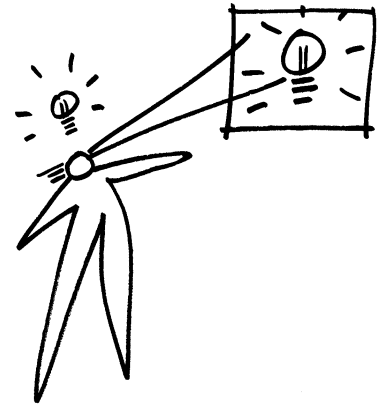


CHAPTER 7

GUIDING PRINCIPLES



Introduction

Up through Chapter 6, the *Frisco Millennium Plan* has projected the general future the City would like to achieve. In support of the *Frisco Millennium Plan*, more specific guiding principles are recommended in this Chapter. In addition to management of the *Plan*, several emerging trends are discussed which will have an impact on the future Frisco.

The City of Frisco needs to be aware of changes in the way communities are developed. Most of Frisco's development will be experienced in the 21st century. While it will still be recognizable, it will be different from the way communities developed in the post-World War II boom years.

This Chapter will include suggestions for further studies and guidelines. Some of these the City may be able to develop in-house, others they may seek outside professional assistance. These suggestions do not encumber the City to pursue them at any specific time. As the City continues to grow and mature, some of these suggestions may evolve with the City. Others may become obsolete as technology and/or development changes current conditions. As with land use and thoroughfares, the City should consider these suggestions as general guidelines that should be flexible enough to accommodate future needs.

Implementation

As the *Frisco Millennium Plan* was developed, there was an understandable confusion between planning and zoning. Simply stated, the *Frisco Millennium Plan* is an overall statement of what the City would like itself to be. This is a "top-down" approach that considers citywide conditions and patterns. Zoning, on the other hand, tends to be economically driven. It is a "bottom-up" approach that is pursued by individual landowners.

Throughout the process of developing the *Frisco Millennium Plan*, it was clearly stated at numerous meetings that the Plan would not change existing zoning. It is worthwhile to reiterate this point:



The Frisco Millennium Plan does not change any current zoning in the City of Frisco.



Most of Frisco's development will be experienced in the 21st century. While it will still be recognizable, it will be different from the way communities developed in the post-World War II boom years.



A comparison of existing zoning with the *Frisco Millennium Plan* revealed several findings:

- **The Frisco Millennium Plan is Consistent with Existing Development**

The *Frisco Millennium Plan* was specifically developed to honor most all existing development. With very few minor exceptions, all existing zoning for currently developed (or development under construction) was consistent with the *Frisco Millennium Plan*.

- **Portions of the Study Area are not Zoned**

The portions of the study area that are currently in the unincorporated County but within Frisco's extraterritorial jurisdiction (ETJ) are not zoned. The ETJ is the land area that the City may grow into in the future. As it develops and annexes these areas, they have two options – zone the land so that it is compatible with the *Frisco Millennium Plan*; or consider another type of zoning district which is compatible with future development plans. If the latter is selected, that would be a trigger to update the *Plan* accordingly.

- **Portions of the City are in Planned Development Zoning**

In the past, the City has approved approximately 150 “PD” (Planned Development) districts. Each “PD” district allows an individual combination of land uses based on the developers concept plan for the district. While some of these “PD” districts have been developed, many have not. In some cases, market conditions and economic influences now present were not in place at the time the “PD” was approved. Therefore, it may not be the current landowners intention to develop as the original “PD” district indicated.

The *Frisco Millennium Plan* cannot predict where and how many of these “PD” districts will be developed as-is or will be changed by the landowner. It is suggested that the City maintain an on-going dialog with the owners of the outstanding undeveloped “PD” districts. If a zoning change is requested by a landowner, the City and the landowner should work cooperatively to develop these areas. If this involves a modification to an existing “PD” district, the City should work proactively with the landowner to accomplish the modifications as quickly and as effectively as possible. The City should also be extremely judicious in the consideration and approval of any further “PD” districts. When “PD” districts are used, they should generally be used to achieve the following:

- “PD” districts should preserve topography, vegetation and/or open space;
- “PD” districts should carry out specific goals of the *Frisco Millennium Plan* or other special studies;
- “PD” districts should be used to provide flexible development standards when appropriate, not to reduce development standards;
- “PD” districts should **not** be used to side-step the Frisco Board of Adjustment for variance requests; and,
- “PD” districts should **not** be used to secure agreements between the applicant and nearby property owners to receive zoning approval.



Land Use Definition Updates

The Frisco Zoning Ordinance is composed of two parts – the Zoning District Map (which shows the geographic location of various zoning districts), and the Zoning Ordinance (which defines each district and includes additional requirements). City staff has cited the need for updating the land use definitions in the Zoning Ordinance.

For instance, in Section 8B of the Frisco Zoning Ordinance, there is a “Use Chart” which specifies various land uses by zoning district. Under “Office & Professional Uses”, the Ordinance differentiates between an architect’s office and an engineering office, even though they both can be located in the same types of zoning districts. Changing the Zoning Ordinance to reduce these types of redundancies will make it an easier document to apply. Additionally, new land uses will be developed in Frisco that do not currently apply to the land use definitions as shown in Section 8B.

It is a typical process after the adoption of a new Comprehensive Plan for a city to update its Zoning Ordinance in this fashion. It is recommended that City staff conduct a review of the Frisco Zoning Ordinance to determine the best means to eliminate areas of confusion.

Proactive Partnering for the Future

Throughout this project, it has been urged that the most effective role the City can have is as a “partner” in its future development. There are many examples of poor city planning where cities merely reacted to growth.

The *Frisco Millennium Plan* is but one component of a broader development policy the City of Frisco needs to further define. The following recommendations are included in the *Frisco Millennium Plan*:

- **Proactive**

The City should take a proactive stance regarding growth in Frisco. This should include meetings with property owners and developers at the earliest opportunity to work together to cooperatively work out concepts for future developments.

- **Flexible**

When a zoning change is requested by a landowner that is not in concert with the *Frisco Millennium Plan* and/or the Frisco Zoning Ordinance, the City and the landowner could entertain new development concepts that are reasonable for both the landowner and the City.

Simply stated, the City should welcome all appropriate developmental proposals, but find positive incentives for encouraging development to be consistent with the *Frisco Millennium Plan* (and its subsequent versions).



Holding Capacity Calculation

In Chapter 2 (Goals), a desired 20-year population projection of approximately 250,000 persons was discussed. Using the area calculations from the Land Use Plan portion of the *Frisco Millennium Plan*, the City's ability to contain population as well as square footage of office, retail, and industrial, may be calculated. The holding capacity calculation is based on the following presumptions:

- Average Single-Family Residential density is projected to be 4 dwelling units (DU) per acre with an average household size of 3 persons.
- Average Multifamily Residential density is projected to be 16 DU/acre with an average household size of 2.5 persons.
- Average floor-area ratio (FAR) for Retail development is projected to be 0.25 FAR.
- Average FAR for Office development is projected to be 0.45 FAR.
- Average FAR for Industrial and Technology development is projected to be 0.15 FAR for each. In "Industrial and Utilities", 90% of these uses are projected to be developed as Industrial uses (1,939 industrial acres).

Table 7-1 shows the holding capacity projections for the *Frisco Millennium Plan*. It is important to acknowledge that actual developed non-residential FAR's may differ from the averages indicated in Table 7-1. In some cases, market forces may also result in actual developments that vary from the projected land uses (such as retail uses being developed in office districts).

Table 7-1 – Holding Capacity Calculation

<i>Development Type</i>		<i>Area</i>	<i>DU/acres</i>	<i>Persons/DU</i>	<i>FAR</i>	<i>Projection</i>
Residential	Single-Family Residential	21,046 acres	4	3.0	---	252,552 persons
	Multifamily Residential	805 acres	16	2.5	---	32,200 persons
Total Residential		21,851 acres	---	---	---	284,752 persons
Non-Residential	Retail	2,350 acres	---	---	0.25	25,591,500 SF
	Office	4,360 acres	---	---	0.45	85,464,720 SF
	Technology	1,609 acres	---	---	0.45	31,539,618 SF
	Industrial	1,939 acres	---	---	0.15	12,669,426 SF
Total Non-Residential		10,258 acres	---	---	---	155,265,264 SF

The holding capacity projections indicate several trends:

- Since the residential holding capacity exceeds the 20-year population projection, Frisco is projected to reach build-out capacity after 2020.
- The residential holding capacity population is a function of average density and average household size. A change in either of these variables will change the holding capacity projection total.
- The amount of Retail holding capacity could contain over 16 Stonebriar Centre malls. This indicates a long absorption time for this market segment, likely well in excess of the 20-year horizon of the *Plan*.



- Similar large holding capacity projections for Office, Technology, and Industrial indicate a deep supply of land for these uses that will take longer than 20 years to be absorbed.

Holding capacity projections are merely the capacity that the land can contain as shown by the *Frisco Millennium Plan*. They are not to be perceived as targets to be achieved.

The North Dallas Jetport

As the *Frisco Millennium Plan* was developed, there was a certain degree of uncertainty regarding the North Dallas Jetport (a single-runway airport located immediately south of FM 720/Main Street approximately 2,200 feet west of the Dallas North Tollway). Owners and developers of the North Dallas Jetport indicated this facility is an asset to the community. Opponents were generally residents in neighborhoods to the north and south of the Jetport.

For many years, the North Dallas Jetport has been underdeveloped – no IFR (instrument approach) equipment, no fixed-base operators, no fueling capabilities, only one constructed building, etc. In the late 1990s, interest seemed to ramp up in creating a business aviation facility at the North Dallas Jetport. However, as the *Frisco Millennium Plan* was being considered for adoption, a new potential landowner had the Jetport under contract and was considering developing it as a non-aviation business park.

There is no clear direction for the North Dallas Jetport at this time. Therefore, the *Frisco Millennium Plan* has suggested two possible futures for this area:

- **The North Dallas Jetport Continues as an Aviation Facility**
If the North Dallas Jetport continues as an active airport, the land north of FM 720/Main Street to the floodplain (between Legacy and Teel) shall not be zoned or developed as any kind of residential. Similarly, the area immediately south of the Jetport – from Stonebrook Parkway to the floodplain – should not be zoned or developed as residential. Both areas are designated with a double asterisk on the *Plan* map. The City should consider replacing the Jetport with a business park development.
- **The North Dallas Jetport Changes to a Business Park**
If the Jetport is changed to a non-aviation business park, the areas described above may be developed as residential subdivisions, with retail and office uses suggested at intersections with Major Thoroughfares.



Affordable Housing

Public comment during the development of the *Plan* brought up a concern for the relative affordability of housing in Frisco. “Affordability” is a relative term. What is affordable for, say Highland Park, would be a different dollar amount than for Frisco. It is also dependent upon the economy and market for homes and mortgages. The City should pursue avenues for encouraging the development of housing that serves all income levels. It is not appropriate for a comprehensive plan to determine the location and amount of “affordable housing”. However, there are some ways the City may address these needs:

- **Density**

Areas of higher residential density should reduce the unit price per home, although demand and land value have the tendency to alter the price savings realized through increases in density. Density results in other impacts (traffic, less open space, etc.) that it might not be an appropriate means to address “affordable housing” in certain areas.

- **Apartments and Attached Single-Family Homes**

It is the impression of many Frisco residents that there is a tremendous increase in apartment construction in the City. While there is a regional increase in apartment construction, the demand for apartments is far exceeded by the number of units currently under construction. This pattern cannot continue. If there is a desire for more “affordable housing” in Frisco, there are other owner-occupied alternatives, such as rowhomes, townhomes, condominiums, etc. The City should review its own Zoning Ordinance to determine how these alternatives may be incorporated into the City. It should also be stated that the *Frisco Millennium Plan* recognizes the importance and need for apartments and encourages their development in appropriate proportions for the City.

- **Redevelopment**

As Frisco continues to grow, older areas may become appropriate for redevelopment. This is typically experienced as older residential units become dilapidated and are purchased in quantity for redevelopment by a single developer. The City should consider tax incentives to encourage redevelopment, especially in areas where structures are in poor condition. Current building standards should be applied to all redevelopment projects, combined with any appropriate architectural sensitivity (such as in the Historic Downtown district). The housing stock in the downtown area of Frisco needs to be redeveloped, and preserved as a residential use in order to provide opportunities for additional affordable housing.

- **Energy Efficiency and Alternative Building Technologies**

“Affordability” not only means being able to qualify for a mortgage, but to also be able to afford its maintenance and upkeep. A big part of that are the monthly utility expenses, especially during the hot Texas summer months. The City can encourage the use of energy efficient designs and building materials to reduce these costs. For instance:

- Changing the color of roofing material to a lighter color (instead of black or dark gray) reduces the interior temperature in the summer.
- When residential subdivisions are designed, there should be enough room between homes to allow air to circulate. Fences between lots that are made of “living landscape”, wrought iron, or wooden rail also encourage air circulation.



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- The popular residential architecture in North Texas – vaulted ceilings, mansard rooflines, and large voluminous spaces – are extremely expensive to heat and cool. The City should determine how to encourage more indigenous Texas architecture for residential applications – such as lower rooflines, clerestory windows, etc.
- Passive and active solar homes were popular in the 1970s but the cost of utility conversion and the relative inefficiency of photovoltaic (PV) cells made this technology unpopular. Today, PV technology has improved tremendously and may be applied to new residential and non-residential construction to perform simple functions, such as powering a hot water heater. The North Texas area has a high solar index in the summer months, so PV technology would have some appropriate applications here. The City should consider allowing PV panels for residential applications and protecting these homes from shadows from neighboring taller structures.
- Previously, “smart homes” (those controlled by a series of computers) were limited to the high-end of the residential market. Computer modules can now be installed at a reasonable price in existing homes. Pre-wiring new homes during construction brings the costs down even further. “Smart homes” can actively manage the major utility systems to reduce operational costs.
- Most commercial building are now constructed with steel framing and this technology is finding its way into residential applications. Steel framing is “environmentally-friendly” and usually uses recycled steel. It is easier to move walls during remodeling and helps to resist fire damage.
- Alternative building materials have been tested by organizations such as the Rocky Mountain Institute for residential applications. Materials including hay bale construction, rammed-earth walls, and shredded tire insulation look like standard masonry construction from the outside but are better insulators and are fire-resistant.
- New hybrid materials are being introduced to the residential market, including a composite wood product that is equal parts recycled plastic and wood fibers. These materials are fastened, cut, and painted like conventional wood, but have a longer life, are stronger than standard lumber, and are fire-resistant.
- New homes and structures are more water-efficient than those built just a few years ago. The City should encourage the use of such devices as low-flow toilets, rapid-volume hot water heaters, “gray water” irrigation systems, rain/freeze/wind sensors for irrigation systems, rainwater collection/enclosed cisterns, etc.

Initially, these technologies and approaches may not be any less costly than standard construction. However, as more and more homes are built in this fashion, the unit costs will decrease. Future advances in building technology should further increase the cost-savings for maintenance and upkeep.



Transit Opportunities

The *Frisco Millennium Plan* identified the potential for four light rail transit stations along the Burlington Northern/Santa Fe Railroad – south of Virginia Parkway, north of El Dorado Parkway, south of FM 720/Main Street, and between Stonebrook and the Dallas North Tollway. While this rail line is used primarily for freight, other cities use freight lines for transit applications through an operational agreement with the rail operator.

At this point, neither DART nor another transit entity have a Frisco light rail line on their “radar screens”, but DART has stated an interest in providing a rail connection to the Legacy Business Park (south of Frisco in Plano). It is conceivable that if Frisco’s population reaches projected levels, there will be a demand for a strong line-haul transit system in Frisco.

Light rail transit on the Burlington Northern/Santa Fe line is not a panacea. For such a mode to succeed, it would have to be supplemented by a bus-oriented transit system that feed passengers into the light-rail line. Frisco could easily incorporate a bus transit system into its future. It is likely that such a system would use smaller local buses (30 to 40-passengers), as opposed to larger 60-passenger buses. Again, Frisco is not a DART member-city and there is no current proposal for a locally-operated bus system. In lieu of DART or a regional agency serving Frisco with transit, other rapidly-growing area cities (namely Allen and McKinney) may determine the need for a “para-regional” transit service serving Collin/Denton/Dallas county area.

The *Frisco Millennium Plan* should not rule out the possibility of both bus and rail transit as it grows. Other facilities may also include park-and-ride lots, bus transfer stations, and “transit-oriented development” in the immediate vicinity of rail stations.

Thoroughfare Opportunities

As the City grows, thoroughfares will have to work much more efficiently. This will be due to the increasing financial cost of building new roadways and the increases in local traffic and population. The City should consider two new requirements:

- **Traffic Impact Analysis**

Many communities now require a TIA (Traffic Impact Analysis) study to be performed for developments of a certain size to determine the extent of traffic impacts upon the local network. A TIA is also a good measure to more accurately determine the necessary roadway improvement costs associated with development. The City should develop a *Traffic Impact Analysis Ordinance* that determines the requirements of a TIA study and the size of development types to trigger a TIA.



- **Thoroughfare Standards Ordinance**

Chapter 6 of the *Frisco Millennium Plan* identifies the various thoroughfare functional classifications and proposes some basic cross-sections. The City should further develop a *Thoroughfare Standards Ordinance* that defines the various thoroughfare cross-sections and associated engineering requirements.

Residential Trends

The main land use in Frisco is and will continue to be the single-family residential home. Yet, there have been many changes in the way homes are built and the functions they serve:

- **House and Lot Size**

In short, homes are getting larger.

At the 2000 National Homebuilders' Association convention, it was reported that the average size for a new home in 1999 was 2,185 square feet, compared to 1,500 square feet in 1970. The *Center for Population Growth* (Washington DC) notes the average new home built in the 1950s was a total area of 900 square feet. In the 1990s, the average new home in the US had a garage with an area of 900 square feet!

And even though the homes are getting larger, the size of the average new home lot is getting smaller. This represents a change in lifestyle – less time for house and yard maintenance but more desire to invest in the value of a new home. Frisco's has numerous good examples of new home construction where very affluent "high-end" homes are constructed close together on 8,000 to 10,000 square foot lots. This same trend is visible in Colleyville, Southlake, Highland Park, and just about every other residential community.

The implications of this phenomenon are that homes occupy a larger percentage of the lot. Permeable cover is decreased, allowing an increase in stormwater runoff. The City should determine an appropriate percentage of lot cover allowed for future developments to assure that stormwater drainage facilities are appropriately sized.

- **Gated Communities**

Over the past 20 years or so, there has been a steady increase in gated communities – subdivisions that allow restricted access (residents, visitors, domestic workers, etc.) and offer enhanced security. Gated communities first began in other parts of the nation as a response to local crime problems. However, many new gated communities are less about "security" and more about "exclusivity". The *Frisco Millennium Plan* does not debate the pros or cons of gated communities. Clearly, some of the nation's most "exclusive communities" are not gated. While there are studies that debate the security merits of gated communities, there is no doubt that they are very popular with both developers and homeowners. Rather, the *Frisco Millennium Plan* is interested in the following aspects of gated communities:



- The *Plan* does not identify potential locations of gated communities. The City should be judicious in the approval of gated developments so as not to create a City full of gated subdivisions.
- Gated communities should be located near the intersection of two Major Thoroughfares, generally on the edge of a neighborhood (not in the center). Gated communities should not impede the alignment or travel of any thoroughfare identified on the *Plan*.
- Gated communities should be designed in such a manner that the entry gate is at least 100 feet from the roadway, to accommodate stacking for entry traffic. Entries should also include a “bail-out” turning lane for vehicles that are denied access.
- Private streets should not interfere with internal neighborhood circulation, or with access to schools or parks.
- Private streets should conform with City standards for street design and construction. Should a gated community become a “public” area (non-gated), all streets would need to be the same design as other public streets. The City should consider developing approval criteria for the eventual conversion of private streets.
- Private streets in gated communities should be stubbed for future access from adjacent areas should the gated community become public.
- All new gated communities should have a “conversion” plan that accounts for the potential to become fully accessible in the future. The removal of the gates should only be done at the request on the homeowners association and in accordance with the “conversion” plan.
- The City should also consider standards for the conversion of standard subdivisions (“public”) to private gated communities. Conversion should be dependent upon 100% homeowner approval and would require replatting to convert public streets to private streets. The “converted gated community” would be required to conform with City standards for entryway design and configuration. “Converted gated communities” should not be located in the middle of a block and should never impede through access on other area streets.

- **Density Options**

Most of Frisco’s newer residential developments have been at a higher density than previously experienced. Zoning districts of “SF-4” to “PH” (3.38 to 4.89 DU’s per acre) are common. While density contributes to a slightly lower house price, it also increases population, student loads on schools, traffic, etc. The City has options regarding residential density:

- Current lot dimensions are usually rectangular, with the lot depth being greater than the lot width. The City could consider allowing lots to be “wide and shallow” so that density could be accommodated but would not be perceived from the street by narrow lots.
- The City should encourage a significant area of open space to be preserved by allowing higher densities on the developed portion of the subdivision. These should include large patches of undisturbed natural vegetation or restored prairie, connectivity between patches, natural vegetation along water courses, and a heterogeneous distribution of nature throughout the community. This is an open space policy that the City should consider only on a case-by-case basis.



- The City could consider developing new residential Zoning District types to address new home/lot ratios. It is suggested that 10 residential Zoning Districts are too many and that new districts should be considered which are more representative of the way subdivisions are currently developed. For instance, the City might consider having only one Multifamily Residential District in the future.

- **Buffers**

There are two conditions that are of concern as the City further develops:

- *Buffers between Residential and Non-Residential Uses* – Where residential neighborhoods abut non-residential developments, there needs to be an appropriate buffer or setback. It is recommended that the City develop a *Buffer Ordinance* to address the appropriate setbacks between residential and non-residential uses.
- *Buffers between Residential Developments of Varying Densities* – In some cases, residential zoning districts of significant different densities may also require a buffer or setback. As above, it is recommended that the City develop a *Buffer Ordinance* to address the appropriate setbacks between residential districts of varying densities.

Buffers are generally not required in a “neo-traditional” or “new urbanism” style development.

- **Transitions from Residential to Non-Residential Uses**

While it does not occur very frequently, there may be some cases where an area that is designated and/or developed as Residential may desire to transition to a Non-Residential use. If this is the case, the City should require the following:

- The area is physically appropriate for non-residential uses.
- The area is an extension of other non-residential zoning and is not separated from other non-residential zoning by a Major Thoroughfare (or larger).
- The rezoning will not create a situation where commercial traffic will negatively impact established and proposed future neighborhoods, schools, and/or parks.
- The rezoning will not leave any residual tracts of residentially-zoned property or an area designated for residential use by the *Frisco Millennium Plan*.
- The rezoning provides for an appropriate transition between non-residential and residential uses through separation by distance, screening, or land use.

- **Transitions from Non-Residential to Residential Uses**

Occasionally, there will be a case where existing areas that are designated and/or developed as Non-Residential may desire to transition to a Residential use. If this is the case, the City should require the following:

- The area is physically appropriate for residential uses.
- The area is an extension of a residential neighborhood shown on the *Frisco Millennium Plan* and is not separated from the neighborhood by a Major Thoroughfare (or larger).
- The rezoning will not create a situation where commercial traffic will negatively impact established and proposed future neighborhoods.



- Proposed non-residential development is not located in an area that encourages or requires access into or through existing or proposed Residential areas.
- The rezoning would not result in a shortage of land required for non-residential development.
- The rezoning would not diminish the land base considered prime for future economic expansion.
- The rezoning would not leave a residual tract of non-residentially-zoned property which would not conform to the *Frisco Millennium Plan* or which would negatively affect the proposed Residential use.
- The rezoning provides for an appropriate transition between residential and non-residential uses through separation by distance, screening, or land use (i.e., creek, 4-lane roadway, etc.).

- **Collar Parks**

The *Frisco Millennium Plan* has identified small greenbelts that serve as a transition between Retail or Multifamily developments and adjacent Single-Family Residential areas. These Collar Parks shall be privately developed and maintained and should include mostly passive uses (trails, picnic areas, etc.). Collar Parks will not be large enough to accommodate field sports (soccer, softball, baseball, etc.), but may include limited active recreation uses (basketball courts, tennis courts, etc.). The main purpose of Collar Parks is to provide distance between Single-Family Residential areas and Retail or Multifamily developments, and to provide for pedestrian and bicycle access that does not require crossing at a major roadway intersection.

- **Access to Retail Areas**

Where residential neighborhoods abut a retail development, rear access to the retail center from the neighborhood should be allowed. This is an old idea that can be found in many parts of the Metroplex, such as Preston and Forest in Dallas. Rear access allows local traffic to avoid driving on Major Thoroughfares and through major intersections to access nearby retail centers.

- **Home Officing/Telecommuting**

Home officing used to be limited to homeowners that operated a small professional practice from their home (such as photographers, architects, lawyers, etc.). Home offices generally do not employ anyone outside the home and do not attract customers or clients to the house. As technology has improved, home officing now includes employees that “telecommute” from their home on a regular basis. This may be on a limited or full-time basis. New home designs have recognized this trend and are now including “home offices” as part of the floor plan (either in the main house or as a part of a detached garage). The City should take this trend into consideration when it reviews design-oriented parameters such as lot coverage, house size, and off-street parking.



- **Extended Families**

In the United States, more and more families are opting to have an elderly relative live with them as opposed to having them in an assisted living environment. There are several sociological and economic reasons for this trend, but it follows a similar pattern experienced in Europe and the Pacific Rim. Suffice to say, home design will begin to reflect the need for a “granny loft” in addition to standard bedrooms and the home office mentioned above. This indicates a potential for even larger average home sizes, perhaps approaching an average of 2,500 square feet per home. If this phenomenon is experienced in Frisco, it will have the potential to increase overall population without increasing the home density. The City may need to consider increasing the off-street parking requirement for single-family homes to account for additional vehicles.

Mixed-Use Development

Mixed-use development is not a new idea – it is currently experienced in Frisco’s historic downtown area. It is the way communities typically developed up until the 1950s.

The *Frisco Millennium Plan* has encouraged mixed-use developments as a way of utilizing land more efficiently. Mixed-use may be accomplished by a vertical mixing of varying uses on the same development, or a “neo-traditional”/“new urbanism” development style (horizontally-mixed development may also be considered). The goals and objectives (Chapter 2) addressed this potential, and the *Plan* map indicates where Retail and Multifamily might be mixed. (Mixed-Use Development is also addressed in Chapter 5, page 101 of this document.)

For instance, the *Plan* would favor 4 corners of Retail only if it incorporated Multifamily, preferably on the upper levels of a Retail building. (If there were no mixed-uses, Retail would be limited to only 2 corners.)

Another type of mixed-use opportunity occurs in the immediate vicinity of the 4 light-rail transit stations. In these areas, there is the opportunity for “transit-oriented development” (TOD) – a development type that encourages a dense mix of residential and non-residential uses within a short walking distance from the rail station (typically a 1,500 foot radius). Should light-rail appear to be a reasonable opportunity, the City should ensure that the areas immediately surrounding the stations are reserved for TOD-style development.

Wherever Mixed-Use Development is considered, the City should consider the following questions:

- Is the Mixed-Use Development compatible with adjacent properties?
- What is the traffic impact on adjacent properties?
- What is the traffic impact on other City thoroughfares?
- Do the Mixed-Use Development’s architectural features tie the development together and are compatible with surrounding development?



It should also be noted that where Multifamily Residential and Retail uses are noted on the *Frisco Millennium Plan*, in most cases Single-Family Residential is also appropriate – either as part of a Mixed-Use Development or as an alternative to Multifamily or Retail.

In Mixed-Use Developments, the minimum Retail size is 15 acres, with no more than 30 acres total Retail development at any given intersection.

Historic Preservation

Although Frisco is perceived to be a new “boomtown”, it has been in existence as a community for over 100 years. The downtown area was the subject of a preservation and enhancement plan that was adopted by the City in 1998. However, downtown is but one district worth preserving:

- Frisco has significant cattle drive trails that should be identified and preserved for future enjoyment.
- The Frisco rail line is one of the principal reasons the City was founded. This alignment, while still serving a valuable transportation function, may be recognized and honored through future design of grade-separated facilities.
- Older homes (in the core of the City) and historic farmsteads (on the fringe of the City) should be encouraged to redevelop consistent with their heritage. The City should consider developing special building standards for these homes and structures that enhances their sense of history.
- The various creek corridors and floodplains have been an important environmental habitat, providing water and shelter for early settlers. These habitats now also provide a needed respite from urban development. The City should investigate methods to enhance their preservation and protection.

Retail Trends

The Dallas/Fort Worth Metroplex is known as an active retail region. Frisco is currently experiencing a surge in this market sector. The new Stonebriar Centre (Preston at SH 121) will add 1.6 million square feet of new retail, including over 150 stores, a 24-screen cinema, and dozens of pad sites. In the immediate vicinity are plans for new “big box” retail, including Lowe’s and a Super Target store. The *Frisco Millennium Plan* attempts to keep Retail developments at Major Thoroughfare intersections, but much of the “Southern Preston” development was already in the pipeline before the *Plan* was initiated. It is suggested that the concentration of nearly 2 million square feet in the immediate vicinity of SH 121 and Preston Road will quickly exceed the capacity of a 6-lane Major Thoroughfare. TxDOT should consider acquiring additional right-of-way to add additional travel lanes when the need arises (at least one additional lane in each direction).



E-Commerce

Stores in the next decade will not appear much different than what is experienced today. However, they will operate differently. The single biggest influential change in Retail has been the Internet. In 1999, Internet sales totaled nearly \$10 billion nationwide – double that of 1998. In fact, since 1996, Internet sales have been doubling every year. Admittedly, it will take a while for \$10 billion in Internet sales to affect the reported \$185 billion (1999) in store sales. As this new shopping style continues to evolve and mature it will change the way certain goods and services are delivered:

- Blockbuster Video – an icon in almost every community – has reorganized to anticipate delivery of entertainment software via non-store means (cable, satellite, modem, etc.). While its bricks-and-mortar outlets will not vanish, they already project that more sales will be delivered through non-store means.
- Modern grocery stores now average more than 60,000 square feet. At the same time, new grocery startups are providing the same products and quality that can be ordered online. Even the major grocery chains are “cannibalizing” their own store customer-base by offering similar services. The trend in the future will be to smaller grocery stores that keep a smaller inventory, mostly perishable items and produce.
- “Record stores” (an atavistic term, since the “record” is an obsolete technology) have been disappearing nationwide for the past few years. Smaller chains have been consolidating, but many CD’s and tapes are now purchased online. The advent of MP3 technology promises to eliminate the need for bricks-and-mortar locations almost entirely.
- Catalog sales – the traditional non-store sales source – have been steadily increasing for the past three decades. Almost anything a person needs can be purchased by a catalog.

If technology is the answer, why are we getting more and more stores? One response is that humans are social animals and still require a place to congregate, to see and be seen. Malls and stores have replaced our Main Streets as the pulse of the community. Retailers note that shoppers often need to touch, feel, smell, see, try on, or taste a product before purchasing (a phenomenon referred to by retailers as “petting”). One of the reasons for the popularity of “neo-traditional” developments is their orientation around shopping streets and people-gathering places.

One thing is for sure – there will be a new type of store that no one has yet anticipated. Malls and retail locations emphasize “shopper-tainment” – keeping customers in the store as long as possible by offering many different diversions, including movies, restaurants, hotels, etc.

The *Frisco Millennium Plan* understands that while more and more retail decisions will be made online and from a catalog, it will not replace the bricks-and-mortar experience. Some store may get slightly smaller as they rely on Internet sales from local distribution sites. This is already being seen in the difficulty that computer stores like CompUSA have experienced in competing with online retailers.



It is conceivable that there will be an increasing demand on local distribution and delivery needs and more and more local retailers offer online purchasing options to their customers. This may result in the need for more “mini-distribution” sites that are close to both retail areas and residential neighborhoods. Whatever its evolution, the City should track changes in the retail industry and be ready to adopt new guidelines for retail development.

“Super-Convenience Stores”

Gas stations have undergone an interesting evolution in the past few decades. Gone are most of the full-service stations with on-site service bays. About 20 years ago, the 7-11 chain was one of the first to merge convenience retail with gas sales. It succeeded and was shortly followed by gas/convenience store that also had a small fast-food restaurant. Today’s “super convenience store” sells gas, rents videos, washes cars, has a dry-cleaning drop-off/pick-up, and may include several fast-food franchises under one roof. These retail sites also tend to be 24-hour, 7-day operations. The City should consider how these “super convenience stores” should be distributed, including:

- The proximity and orientation to nearby residential neighborhoods.
- The location of noise-producing components, including car wash bays and drive-through menu boards.
- The location and lensing of on-site illumination.
- The location of dumpsters and other “back of the house” operations.
- The number of on-site parking spaces.
- The location and spacing of driveways and access points.

“Super convenience stores” will likely continue to evolve – witness the addition of gasoline sales at traditional grocery stores including Albertson’s and Tom Thumb. These two retail types may start to merge towards a middle-ground and become more and more alike.

Village-Style Developments

A popular development approach was promoted in the 1980s that mimicked old-style retail “streets” and “villages”. These neo-traditional designs were a throwback to a simpler time, one that usually did not involve vast amounts of parked cars.

“Village developments” are typically mixed-use developments, usually combining retail and office uses in either a vertical or horizontal configuration. One of the better known local examples of this trend is the Southlake Town Center (along FM 1709 in Southlake). Sometimes these villages can appear to be contrived, although older developments like Highland Park Village (Preston Road at Mockingbird Lane in Highland Park) have stood the test of time – that particular center was built in the late 1920s.



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Over the last 2 to 3 years, Texas retail developers have gotten the notion that mixed-use retail centers are now good things. The City needs to develop a *Village Center Standards Ordinance* that addresses aspects such as architectural style, building materials, off-street parking, lighting, location, landscaping, access, height, appropriate mix of uses, etc.

Off-Street Parking Standards

Frisco will experience two conflicting influences – retail will be concentrated in a confined area at Preston and SH 121 while at the same time online retail will be playing an increasing role in purchase decisions. Both of these will affect the amount of off-street parking necessary to serve “bricks-and-mortar” store locations.

There are accepted standards for retail developments that vary by retail development type. More or less, off-street retail parking requirements average 1 space per every 200 square feet of leasable shopping area. When that ratio is too high, the result is a large parking lot that appears empty most of the year. When the ratio is too small, circulation and business suffer equally. The City should explore the potential for reducing off-street parking requirements for large retail centers, especially in light of E-commerce and its impact on store sales.

In some circles, there is a consideration that significantly reducing the off-street parking requirement will result in use of other modes (transit, pedestrian, etc.). Reducing off-street parking requirements usually works in a cohesive district (such as a downtown and shopping mall) where there can be a centralized parking area that encourages store-to-store walking.

New Retail Market Study

Just because the Dallas/Fort Worth Metroplex is an active retail market does not guarantee success of a new retailer or a new concept. In the past 10 years, there have been significant retail failures in North Texas – Venture, Pace, Food Lion, and Incredible Universe, among others. In some cases, these failures were due to a saturated marketplace. Others simply misunderstood how customers purchase certain goods.

But one common element for these failures was that they tended to leave behind a building that was difficult to quickly re-lease. As a result, communities today are still reeling from their effects. The Colony, for instance, finally found a use for their abandoned Food Lion store – it is now the city’s new City Hall and City Library. The City of Frisco has been fortunate to have avoided these recent failures. However, it can be safely stated that there are no guarantees that new retail types and outlets will succeed in the long-term.

The City shall require a *Retail Market Study* to be submitted for all retail and commercial zoning requests in order to addresses the potential for oversupply of Retail developments. This may include rezonings for retail uses that are currently zoned non-retail. It may also include new types and concepts for retail stores, as well as odd-sized stores (like Food Lion) with no specific “exit strategy” or adaptive reuse approach.



The *Retail Market Study* would have the following attributes:

- The *Retail Market Study* would **not** be required if the subject property is already zoned to allow retail development. It would only apply to new retail zoning requests;
- The *Retail Market Study* would **not** be required for any development along SH 121, US Highway 380, FM 423, the Dallas North Tollway, or along Preston Road (from El Dorado south to SH 121); and,
- The *Retail Market Study* would be prepared by an independent market consultant and would be paid for by the development proponent. The City of Frisco shall “pre-qualify” a group of candidate firms to prepare the *Study*. In order to assure complete objectivity, the selected consultant must have no financial or contractual interest in the property or with the developer.

In the actual preparation of the *Retail Market Study*, the following parameters should be included:

- The *Study* should define the market study area being analyzed and all retail properties in the study area with their building square footage areas;
- The total retail square footage that is part of the proposed development, including local, neighborhood, regional, and “super” retail types;
- The *Study* should use an FAR of 0.25 FAR for all undeveloped retail sites within the study area;
- The *Study* should identify the specific residential density (number of residential units) within the study area; and,
- In determining the appropriate amount of retail, the *Study* should use a ratio of 30 gross leasable square feet of retail per person as a target ratio for the study area.

Office Trends

Technology and real estate prices have resulted in new trends in office development. The average number of office square feet per employee has shrunk over the years – in some cases, employees have no permanent desk or workstation at their office.

Alternative Officing

This is a general term which refers to any office scenario that varies from the “traditional”. Alternative officing can include telecommuting, “hoteling” (reserving a workstation only when an employee needs to come into the office), and flexible work schedules. The result has been that employers can develop a smaller office space for the same number of workers. That has resulted in an increase of the number of off-street parking spaces needed to accommodate the modern office development – increasing roughly from the pervious 4 spaces per 1,000 square feet to 5 spaces per 1,000 square feet.



Employers are also now offering many more amenities as part of the office environment, including on-site day care, concierge services, on-site fitness centers, restaurants, dry cleaners, even massage therapists. Today's offices accommodate more than just business. Therefore, the City needs to investigate how these trends will impact off-street parking requirements, delivery and loading needs, and other similar functions.

Global “E-Business”

Business in the late 20th and early 21st centuries has experienced a global expansion. It is not uncommon for offices to literally run 24 hours a day in order to coordinate with branch offices in other time zones and continents. This has expanded the workday beyond the traditional “9 to 5”. Offices may have employees on-site every hour of every day.

This, too, impacts how office developments work in a community context. Off-street parking requirements may need to be reconsidered in light of a 24/7 operation. Buffers between office and residential uses may need to be increased to account for the longer hours of operation.

The *Frisco Millennium Plan* identifies locations for future office development and notes these emerging trends. However, the City may wish to reconsider some office development requirements in light of these new paradigms.

Conference Facilities and Hotels

As Frisco grows, there will be an increasing need to provide conference facilities to support local businesses. To a certain degree, full-service hotels will fill this market demand. The City may also seek to develop multi-purpose facilities, such as a conference center, to attract corporations and conferences to Frisco. Numerous locations for such facilities abound throughout the City. However, should the City consider the development of a conference center, a desirable location would be along or near the Dallas North Tollway corridor.

In addition to traditional hotels and motels, the lodging market has seen the development of extended stay hotels. Originally targeted for business travelers, extended stay hotels are often as inexpensive as apartments and cater to long term lodging (weeks or months). Many cities have seen a proliferation of these relatively inexpensive motels in inappropriate locations. Before more extended stay hotels are developed in Frisco, the City should develop a policy regarding the development and location of these uses.

Industrial Trends

As with the Office and Retail markets, technology has made major changes in the American industrial market. Nationwide, the US economy is becoming less dependent upon domestic manufacturing. There will likely always be a demand for domestic manufacturing, but most of the “industries” in the US are now based on providing information.



Information-Based Economy

The largest and fastest growing industries are those that provide various types of information – telecommunications, software, entertainment, etc. Major corporations such as Microsoft, America Online, Motorola, Time Warner, AT&T, and others, provide varying degrees of information. (Traditional “smokestack” industries are becoming scarcer and tend to be located outside the US.) The City of Frisco has expressed a strong desire to attract these information-based businesses to the City, either as part of a Technology business park or to other Office and Industrial areas. It is recommended that that City work closely with the Frisco Economic Development Corporation to target and attract specific businesses/industries to fill this market niche.

“Industrial” development in Frisco will be more about information and telecommunications, and less about processing or assembly. But even with all these advances in technology, there will still be a need for warehousing, fabrication, and distribution (traditionally classified as industrial land uses). In fact, as there is more and more dependence on “e-commerce”, there will be an increasing need for regional and local warehousing and distribution. Chapter 5 discussed these new “flex” industrial developments – combining administrative, warehousing, distribution, fabrication and/or light assembly in a single structure. There is every indication that these “flex” developments will continue to develop. It is recommended that the City review its Zoning Ordinance to determine the applicability of the “I” district for “flex” development.

Global “E-Business”

As with offices, it is not uncommon for industries to run 24 hours a day in order to coordinate with locations in other time zones and continents. This has expanded the workday beyond the traditional “9 to 5”, with employees working in shifts every hour of every day.

Like 24/7 offices, industries that operate at all hours fit into a community in a different manner. Off-street parking requirements may need to be reconsidered and buffers between residential uses may need to be increased to account for the longer hours of operation. The City should review its industrial development requirements to account for longer operational hours.

The “Wired City”

Technology has always influenced the shape of neighborhoods, communities, and cities. Centralized utilities and electrical power contributed to the development of large cities. The automobile has shaped the world’s development patterns for nearly 100 years. Now, advances in information technology hold the promise to change the way people work, shop, and play.



However, most cities – including Frisco – do not have the “info-structure” in place to capitalize upon these advances in telecommunications. Palo Alto (California) is one such “wired city” that is taking advantage of technology to provide better services and convenience to its residents. It is no surprise that Palo Alto is also the home of Stanford University – the birthplace of major technology firms including Cisco Systems and Sun Microsystems.

There are two constants in technology – it is constantly changing and advancing; and as technology advances it tends to become more affordable. Therefore, there are some considerations the City should look at to take advantage of this technology.

Internet Access/Wiring

Regardless of the state-of-the-art of wireless connectivity, it always ultimately involves delivering data via a copper wire, twisted pair, or a fiber optic cable to a receiver (computer or television). While most offices and businesses are wired for data delivery, the City currently does not have any similar standards for residential applications. Residences with Internet access are connected through conventional or enhanced telephone lines, a cable modem, or a satellite uplink (a service known as “DirectPC”). Limitations in bandwidth in all of these methods have currently limited the scope of the Internet.

The City should consider a new wiring standard for residential structures to accommodate existing access technology. The wiring standard may be a modification of similar networking standards used by offices and businesses. For future technologies, the City might also consider the installation of an empty conduit (“ring and string”) to accommodate new cabling. It is always less expensive to pre-install these improvements during construction, rather than retrofitting after the fact. For the foreseeable future, wired connections will be the least expensive, most secure, and most efficient means of connecting to the Internet.

A progressive step would be for the City to also become the local Internet service provider (ISP). The City already provides water and sewer service to every occupied structure. Some other cities are also the local electric utility. It might be feasible to provide the local ISP connection in the same fashion. The principal drawback will likely be competition from other commercial ISP companies. The City may want to investigate the potential of being the local ISP connection in the future.

Cellular Tower Screening

For the better part of the last 10 years, cities nationwide have wrestled with the issue of locating cellular towers. As technology has advanced from analog cellular to digital PCS (personal communication systems), the need for cellular towers has steadily increased. As individual cells have gotten smaller to accommodate increasing demand, towers have multiplied.



The ultimate answer to this dilemma will be technological advances in personal communications. Satellite telephones currently exist, but are extremely expensive and have a relatively high per-minute connection charge. As this technology advances and becomes more accessible, prices will fall, just as they did with cellular telephones. Since satellite telephones need no ground-based towers, the tower issue will slowly diminish. However, it will likely take one to two decades for all existing analog and digital telephones to be replaced by satellite technology.

In the interim, the City should review its cellular tower location policy to allow placement of towers in areas where there are not visible (such as inside a church steeple) and co-placement with other utilities. Other “masking” treatments may also be considered as brought forth by the cellular tower industry.

Future Telecommunications Technologies

Technology’s mantra is “the only constant is change”. New technologies introduced today are quickly upstaged by the next generation. It is hard for companies and individuals, much less the City, to keep up. It is expected that technology will become more affordable and more portable. Wireless connectivity will improve, either via digital systems or satellite communications.

How does this affect Frisco?

- There will be a greater reliance on providing information in a digital realm. Items such as this *Frisco Millennium Plan*, the City’s Zoning Ordinance, and other policy documents can easily be made available as “read-only” documents in a digital format of some kind. This information could be available to anyone at anytime.
- Updating the *Frisco Millennium Plan* will become increasingly reliant on technological information – from GIS (geographic information system) data provided by the City to satellite digital imagery provided by private firms.
- Increased bandwidth will result in improved videoconferencing capabilities. The City will increase its ability to provide 1-to-1 communications through “virtual” Town Hall meetings and other similar forums.

Whatever the medium, the City should be open to new advances in technology that enhance its ability to deliver information and services to the residents of Frisco.

Urban Design

Many of these emerging trends have centered on technology. But an equally important aspect is the look and visual aesthetic of the City. There are several areas that the City should pursue after the *Frisco Millennium Plan* is adopted:

- **Corridor Studies**

Major roadway corridors are a key method that a community identity is established. The City has many existing and proposed principal corridors that will set the tone for the City's visual appeal. The City is currently developing a *Preston Road Overlay District* to address these issues along the Preston Road corridor. The City should consider similar corridor studies for other major corridors, including but not limited to SH 121, the Dallas North Tollway, and US Highway 380.

- **New Housing Styles**

The most popular housing styles are mimicking designs from 100 years past. Home designers have rediscovered the porch, for instance. These designs are more than nostalgic – they also serve an environmental purpose (deep-set porches shade windows from the summer sun and lower air conditioning expenses). The City should provide additional architectural guidelines that encourage these practices.

- **Illumination Standards**

Too much or too little light in a community can have the same undesirable effect. The City should develop an *Illumination Standards Ordinance* that determines the location, style, direction (lensing), and intensity of street lighting on residential and non-residential streets, as well as on-site lighting.

- **Urban Design Plan**

Upon completion and adoption of the *Frisco Millennium Plan*, the City may desire to address the urban design components of the community. Comprehensive plans often either have an urban design chapter, or include a follow-up study. The City should consider the development of an *Urban Design Plan* to address issues including the Town Center, major roadways, street furniture, signage, and other visual characteristics of the community.

- **Public Art**

A vital part of urban design, the placement and distribution of public art throughout the City enhances its visual character. The redevelopment of Central Expressway is a good example of how public art can improve even the most urbanized of corridors. As part of an overall *Urban Design Plan*, the City should identify locations for public art installations, such as major intersections along the Dallas North Tollway.



Guiding Principles Summary

Chapter 7 has presented numerous options for the City after the adoption of the Frisco Millennium Plan. These suggestions are summarized below.

Implementation

- The City should maintain an on-going dialog with the owners of the outstanding undeveloped “PD” districts to work cooperatively to develop these areas if a zoning change is requested by a landowner.
- The City should also be judicious in the consideration and approval of any further “PD” districts.
- The City should conduct a review of the Frisco Zoning Ordinance to determine the best means to eliminate areas of confusion, not to change existing zoning districts.
- The City should take a proactive stance regarding growth in Frisco. This should include meetings with property owners and developers at the earliest opportunity to work together to cooperatively work out concepts for future developments.
- If a zoning change is requested by a landowner that is not in concert with the *Frisco Millennium Plan* and/or the Frisco Zoning Ordinance, the City and the landowner should entertain new developments that are reasonable for both the landowner and the City.

The North Dallas Jetport

- If the North Dallas Jetport continues as an active airport, the land north of FM 720/Main Street to the floodplain (between Legacy and Teel) should not be zoned or developed as any kind of residential. Similarly, the area immediately south of the Jetport – from Stonebrook Parkway to the floodplain – should not be zoned or developed as residential. Both areas are designated with a double asterisk on the *Plan* map. The City should consider replacing the Jetport with a business park development.
- If the Jetport is changed to a non-aviation business park, the areas described above may be developed as residential subdivisions, with suggested at intersections with Major Thoroughfares.

Affordable Housing

- There desire for more “affordable housing” may be met with other owner-occupied alternatives, such as rowhomes, townhomes, condominiums, etc. The City should review its own Zoning Ordinance to determine how these alternatives may be incorporated into the City.
- The City should encourage the use of energy efficient designs and building materials to reduce housing costs.
- The City should determine how to encourage more indigenous Texas architecture for residential applications – such as lower rooflines, clerestory windows, etc.



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- The City should consider allowing solar (PV) panels for residential applications and protecting these homes from shadows from neighboring taller structures.
- The City should study how new and alternative building materials and technologies can be incorporated into the City to save energy, water, and encourage improved air quality.

Transit and Thoroughfares

- The *Frisco Millennium Plan* should not rule out the possibility of both bus and rail transit as it grows. Other facilities may also include park-and-ride lots, bus transfer stations, and “transit-oriented development” in the immediate vicinity of rail stations.
- The City should develop a *Traffic Impact Analysis Ordinance* that determines the requirements of a TIA study and the size of development types to trigger a TIA.
- The City should further develop a *Thoroughfare Standards Ordinance* that defines the various thoroughfare cross-sections and associated engineering requirements.

Residential

- The City should determine an appropriate percentage of lot cover allowed for future residential developments. The City will need to change its stormwater runoff equations to assure that stormwater drainage facilities are appropriately sized.
- The City should develop a policy on the general design and location of new gated residential communities.
- The City should consider allowing lots to be “wide and shallow” so that density could be accommodated but would not be perceived from the street by narrow lots.
- The City should consider preserving open space in a development by allowing higher densities on the developed portion.
- The City should consider developing new residential Zoning District types to address new home/lot ratios and which are more representative of the way subdivisions are currently developed.
- The City should develop a *Buffer Ordinance* to address the appropriate setbacks between residential and non-residential uses, and between residential districts of varying densities.
- The City should develop standards for the transitions of certain types of residential areas to non-residential uses, and for the transition of certain types of non-residential areas to residential uses.
- The City should encourage rear access from residential subdivisions to adjacent retail centers so local traffic may avoid driving on Major Thoroughfares and through major intersections.
- The City should take the home office/telecommuting trend into consideration when it reviews design-oriented parameters such as lot coverage, house size, and off-street parking.



- The City may need to consider increasing the off-street parking requirement for single-family homes to account for additional vehicles as a result of extended families.

Mixed-Use Development

- The City should encourage mixed-use development in accordance with the *Frisco Millennium Plan*.
- Should light-rail appear to be a reasonable opportunity, the City should ensure that the areas immediately surrounding the stations are reserved for transit-oriented development.

Historic Preservation

- The City should identify and preserve historic trails for future enjoyment.
- The City should recognize the historic importance of the Frisco rail line through future design of grade-separated facilities.
- The City should encourage the redevelopment of older homes and farmsteads and should consider developing special building standards for these homes and structures that enhances their sense of history.
- The City should investigate methods to enhance the preservation and protection of key environmental habitats, creek corridors, and floodplains.

Retail

- At Preston and SH 121, TxDOT should consider acquiring additional right-of-way to add additional travel lanes when the need arises (at least one additional lane in each direction).
- The City should track changes in the retail industry and be ready to adopt new guidelines for retail development.
- The City should consider how “super convenience stores” are located and designed.
- The City should develop a *Village Center Standards Ordinance* that addresses aspects such as off-street parking, lighting, location, landscaping, access, height, appropriate mix of uses, etc. These standards shall be developed with the assistance of residents and developers.
- The City should consider new impact of new technology on store sales and be prepared to alter the off-street parking requirement accordingly.

Office

- The City should investigate how new office trends will impact off-street parking requirements, delivery and loading needs, and other similar functions.



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- The City may wish to reconsider some office development requirements in light of emerging office trends.

Industrial

- The City should work closely with the Frisco Economic Development Corporation to target and attract specific businesses/industries.
- It is recommended that the City review its Zoning Ordinance to determine the applicability of the “I” district for “flex” development.
- The City should review its industrial development requirements to account for longer operational hours.

The “Wired City”

- The City should consider a new wiring standard for residential structures to accommodate existing access technology. The wiring standard may be a modification of similar networking standards used by offices and businesses. For future technologies, the City might also consider the installation of an empty conduit (“ring and string”) to accommodate new cabling.
- The City may wish to investigate the potential of being the local ISP connection in the future.
- The City should review its cellular tower location policy to allow placement of towers in areas where there are not visible (such as inside a church steeple). Other “masking” treatments may also be considered as brought forth by the cellular tower industry.
- The City should be open to new advances in technology that enhance its ability to deliver information and services to the residents of Frisco.

Urban Design

- The City should provide additional architectural guidelines that encourage improved energy efficiency.
- The City should develop an *Illumination Standards Ordinance* that determines the location, style, direction (lensing), and intensity of street lighting on residential and non-residential streets, and for on-site lighting.
- The City should consider the development of an *Urban Design Plan* to address issues including the Town Center, major roadways, street furniture, public art, signage, and other visual characteristics of the community.

